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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Srikanth Suryanarayanan et al.

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Group Art Unit: 3737

Serial No.: 10/723,192

Examiner: Unassigned

Filed: November 25, 2003

For: METHOD AND APPARATUS FOR  
SEGMENTING STRUCTURE IN CT  
ANGIOGRAPHYAtty. Docket: GERD:0073/YOD/RAR  
140312-1Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313CERTIFICATE OF MAILING  
37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

November 4, 2004

Date

Stephanie Sauls

Sir:

**INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. §§ 1.97(b)(3) AND 1.98**

In compliance with the duty of disclosure under 37 C.F.R. § 1.56(a), Applicants respectfully request that this Information Disclosure Statement be entered and that the references listed on the PTO-1449 Form be considered by the Examiner and made of record. **In accordance with the revised procedures promulgated by the Office of Patent Legal Administration and relating to applications filed after June 30, 2003, copies of the listed references are not required to be submitted to the Examiner.**

In accordance with 37 C.F.R. § 1.97, this Information Disclosure Statement is not to be construed as a representation that a search has been made, as an admission that the information

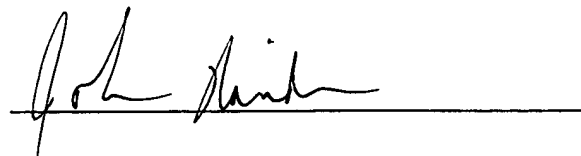
cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b), or as a representation that no other possibly material information, as defined in 37 C.F.R. § 1.56(b), exists.

Furthermore, the references listed on the attached PTO-1449 Form are not to be construed as an admission that these references qualify as prior art as to the above-referenced application or any related application. Rather, these references are being presented for the Examiner's consideration without prejudice to Applicants' right to demonstrate that any of these references do not qualify as prior art should the Examiner choose to apply any of these references.

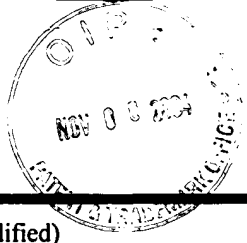
The following information is listed below in accordance with 37 C.F.R. §1.98. Any explanation of non-English language documents contained in this Information Disclosure Statement is believed to constitute a concise explanation of the relevance of the listed reference as it is presently understood by the individual designated in § 1.56(c) most knowledgeable about the content of the listed reference, in accordance with 37 C.F.R. § 1.98(a)(3).

Respectfully submitted,

Date: November 4, 2004

A handwritten signature in black ink, appearing to read "John Rariden", is written over a horizontal line.

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<b>Form PTO-1449</b> (modified)  List of Patents and Publications For Applicant's Information Disclosure Statement  (Use several sheets if necessary)	<b>ATTY. DOCKET NO.</b> 140312-1/YOD (GERD:0073)	<b>SERIAL NO.</b> 10/723,192
	<b>APPLICANT</b> Srikanth Suryanarayanan et al.	
	<b>FILING DATE</b> November 25, 2003	<b>GROUP</b> 3737

**U.S. PATENT DOCUMENTS**

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLA SS	SUB CLASS	FILING DATE IF APPROPRIATE
	A1	5,570,404	10/29/96	Liang et al.	378	8	09/30/94
	A2	5,832,134	11/3/98	Avinash et al.	382	257	11/27/96
	A3	10/301,018		Mullick et al.			11/21/02
	A4	10/304,581		Suryanarayanan, Srikanth et al.			11/26/02

**FOREIGN PATENT DOCUMENTS**

EXAM. INIT.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION

**OTHER ART (Author, Title, Journal, Volume, Pertinent Pages, & Date)**

	C1	Adams, Rolf, et al., Seeded Region Growing, IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 16, No. 6, June 1994, Pages 641-647
	C2	Alyassin, Abdalmajeid M., et al., Semi-automatic Bone Removal Technique from CT Angiographic Data, Proceedings of the SPIE – The International Society for Optical Engineering 2000, General Electric Research & Development Center, GE Medical Systems
	C3	Aylward, Stephen R., et al., Systems and Methods for Tubular Object Processing, PCT application, International Publication No. WO 01/78010 A2, IP Publication date 18 October 2001
	C4	Aylward, Stephen R., et al., Systems and Methods for Tubular Object Processing, PCT application, International Publication No. WO 01/78010 A3, IP Publication date 18 October 2001
	C5	Boehm, Guenther, et al., Three-Dimensional Segmentation of Bone Structures in CT Images, Proceedings of the SPIE, Vol. 3661, p. 277-286, Medical Imaging 1999; Image Processing
	C6	Cline, Harvey E., et al., Magnetic Resonance Segmentation with the Bubble Wave Algorithm, Proceedings of the SPIE, Volume 5032, pp. 1658-1666 (2003); Medical Imaging 2003; Image Processing
	C7	Saha, Punam K. et al., Automatic bone-free rendering of cerebral aneurysms via 3D-CTA, Proceedings of the SPIE – The International Society for Optical Engineering, Vol. 4322 n 3 2001, pp. 1264-1272
	C8	Subramanyan, Krishna, Vessel Tracking and Tree Extraction Method and Apparatus, PCT application, International Publication No. WO 03/046835 A1, IP Publication date 5 June 2003

	C9	Venema, Henk W., et al., CT Angiography of the Circle of Willis and Intracranial Internal Carotid Arteries: Maximum Intensity Projection with Matched Mask Bone Elimination Feasibility Study, Radiology 2001 Mar, vol. 218(3), pp. 893-8
	C10	Westin, Carl-Fredrik et al., Using Local 3D Structure for Segmentation of Bone from Computer Tomography Images, Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition 1997, IEEE, Los Alamitos, California, U.S.A., 97CB36082, p. 794-800
	C11	Westin, C-F, et al., Tensor Controlled Local Structure Enhancement of CT Images for Bone Segmentation, Proc. Of First Int. Conf. On MICCAI, Springer, Verlag, pp. 1205-12, 1998, Brigham and Women's Hospital, U.S.A.
	C12	Yan, Changjiang, et al., Extraction of Blood Vessel in CT Angiography Image Aided by Fuzzy Logic, Proceedings of ICSP2000, pp. 926-929
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>
EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

*Information Disclosure Statement--PTO-1449 (Modified)*